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EXAMINER
PEREZ GUTIERREZ, RAFAEL

ART UNIT	PAPER NUMBER
2686	

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/772,379	Rosenberg	
	Examiner	Art Unit	
	Rafael Perez-Gutierrez	2686	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12 October 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-24* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-24* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. This Action is in response to Applicant's amendment filed on October 12, 2004. **Claims 1-24** are still pending in the present application. **This Action is made FINAL.**

Claim Objections

2. **Claims 3 and 10** are objected to because of the following informalities:

a) On **line 13** of **claim 3**, replace "the" with --a-- before "predetermined" in order to provide proper antecedent basis; and

b) On **line 40** of **claim 10**, insert --the-- before "predetermined".

Appropriate correction is required.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office Action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. **Claims 1-24** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Barber et al. (U.S. Patent # 5,442,806)** in view of **Blakeney, II et al. (U.S. Patent # 6,466,802 B1)**, and further in view of **Bamburak et al. (U.S. Patent # 5,832,367)**.

Consider **claims 1, 6, and 9**, Barber et al. clearly show and disclose a preferred carrier selection (intelligent roaming) method for enabling a cellular telephone 10 (mobile station) to select an available cellular carrier (preferred neutral service provider) from a plurality of cellular carriers (service providers) within a communication system (abstract, figures 1, 3, and 4, column 2 lines 51-55), the method comprising the steps of:

identifying a current communication system (figure 1) servicing a geographic area where the cellular telephone 10 (mobile station) is presently located (i.e., by scanning a primary carrier frequency band (figure 3 step 104), locating a control channel in response to the scanning (inherent since the telephone 10 is receiving a broadcast that it is always transmitted in a control channel), and receiving a system identification code (SID) in response to locating the control channel (this process reads on **claim 6**)) (figure 3 steps 104 and 106 and column 6 lines 49-64);

determining that the current communication system is not serviced by a home carrier (service provider) responsive to the step of identifying the current communication system (i.e., by comparing the received SID with a stored home carrier (service provider) SID) (figure 3 steps

110 and 116 and column 6 line 66 - column 7 line 7);

determining that the current communication system is not serviced by a preferred carrier (service provider) responsive to the step of identifying the current communication system (i.e., by comparing the received SID with preferred carriers (service providers) SIDs) (figure 3 steps 118 and 120 and column 7 lines 20-26);

determining that a frequency band of the current communication system corresponds to a predetermined frequency band (i.e., primary carrier frequency band) of frequency bands (i.e., primary and secondary carrier frequency bands) stored in the cellular telephone 10 (mobile station) (i.e., as a result of comparing the frequency band of the current communication system to the frequency bands stored in the telephone 10 (this comparison and result reads on **claim 9**) (figure 2 and column 6 line 46 - column 7 line 54) responsive to the steps of determining that the current communication system is not serviced by the home carrier (service provider) and the preferred carrier (service provider) (i.e., by determining whether a PC-AVAIL flag has been set in response to not matching the received SID with the home carrier (service provider) SID and with the preferred carrier (service provider) SID) (figure 4 steps 134 and 144 and column 7 lines 30-41); and

selecting the current communication system as the preferred neutral service provider (i.e., neither home or preferred) only when the frequency band (i.e., primary carrier frequency band) of the current communication system corresponds to the predetermined frequency band (i.e., primary carrier frequency band) to permit the cellular telephone 10 (mobile station) to obtain full service from the current communication system (figure 3 steps 152, 154, and 112 and column 7

lines 41-54).

However, Barber et al. do not specifically disclose that the step of identifying is independent of any frequency bands listed in a system access list (SAL) stored in the cellular telephone 10 (mobile station).

In the same field of endeavor, Blakeney, II et al. disclose a method for performing preferred system selection in which a current communication system is identified independent of any frequency bands listed in a universal system table (system access list (SAL)) stored in subscriber (mobile) station (i.e., the current system is identified through a system ID (SID) stored in the universal system table (system access list (SAL)), as opposed to a frequency band stored in the universal system table (system access list (SAL)), because multiple systems could have identical acquisition parameters such as frequency band, mode, channel number, etc...) (column 2 lines 34-41, column 3 lines 2-38, and column 6 line 57 - column 7 line 2).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to identify the current communication system independently of any frequency band listed in a universal system table (system access list (SAL)) as taught by Blakeney, II et al. in the method taught by Barber et al. for the purpose of optimal system identification.

However, Barber et al., as modified by Blakeney et al., do not specifically disclose that the predetermined frequency band and the frequency bands are listed in a system access list (SAL) stored in the cellular telephone 10 (mobile station).

In the same field of endeavor, Bamburak et al. clearly show and disclose an intelligent

roaming method for selecting a wireless communications service provider in a multi-service provider environment in which a frequency band search schedule (system access list (SAL)) listing an optimal frequency band (predetermined frequency band) of frequency bands (optimal, preferred) is stored in the mobile communication device 10 (mobile station) and used for selecting the service provider (abstract, figures 3, 8, and 9, column 3 lines 37-48, column 4 lines 12-36, and column 8 line 50 - column 9 line 49).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the frequency band search schedule (system access list (SAL)) taught by Bamburak et al. into the cellular telephone 10 (mobile station) taught by Barber et al., as modified by Blakeney et al., for the purpose of locating an optimal service provider (Bamburak et al.; column 3 lines 43-48).

Consider **claim 2**, and **as applied to claim 1 above**, Barber et al., as modified by Blakeney et al., and as further modified by Bamburak et al., clearly show and disclose the claimed invention except that the predetermined frequency band (i.e., primary carrier frequency band) further comprises a first frequency band of the frequency bands listed in priority order in the SAL.

Bamburak et al. further disclose that the optimal frequency band (predetermined frequency band) comprises a first frequency band OPT of frequency bands listed in priority order in the frequency band search schedule (system access list (SAL)) (abstract, figures 8 and 9, column 4 lines 36-47, column 8 line 62 - column 9 line 45).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time

the invention was made to list the optimal frequency band (predetermined frequency band) first in the frequency band search schedule (system access list (SAL)) as taught by Bamburak et al. in the cellular telephone 10 (mobile station) taught by Barber et al. for the purpose of locating the most optimal service provider (Bamburak et al.; column 3 lines 43-48).

Consider **claim 3**, Barber et al. clearly show and disclose a preferred carrier selection (intelligent roaming) method for enabling a cellular telephone 10 (mobile station) to select an available cellular carrier (service provider) from a plurality of cellular carriers (service providers) within a communication system (abstract, figures 1, 3, and 4, column 2 lines 51-55), the method comprising the steps of:

identifying a current communication system (figure 1) servicing a geographic area where the cellular telephone 10 (mobile station) is presently located (figure 3 steps 104 and 106 and column 6 lines 49-64);

determining that the current communication system is not serviced by a home carrier (service provider) responsive to the step of identifying the current communication system (i.e., by comparing a received SID with a stored home carrier (service provider) SID) (figure 3 steps 110 and 116 and column 6 line 66 - column 7 line 7);

determining that the current communication system is not serviced by a preferred carrier (service provider) responsive to the step of identifying the current communication system (i.e., by comparing the received SID with preferred carriers (service providers) SIDs) (figure 3 steps 118 and 120 and column 7 lines 20-26);

determining that a frequency band of the current communication system does not

correspond to a predetermined frequency band (i.e., primary carrier frequency band) of frequency bands (i.e., primary and secondary carrier frequency bands) stored in the cellular telephone 10 (mobile station) responsive to the steps of determining that the current communication system is not serviced by the home carrier (service provider) and the preferred carrier (service provider) (i.e., by determining whether a PC-AVAIL flag has not been set in response to not matching the received SID with the home carrier (service provider) SID and with the preferred carrier (service provider) SID) (figure 4 steps 134 and 136 and column 7 lines 30-38).

However, Barber et al. do not specifically disclose that the step of identifying is independent of any frequency bands listed in a system access list (SAL) stored in the cellular telephone 10 (mobile station).

In the same field of endeavor, Blakeney, II et al. disclose a method for performing preferred system selection in which a current communication system is identified independent of any frequency bands listed in a universal system table (system access list (SAL)) stored in subscriber (mobile) station (i.e., the current system is identified through a system ID (SID) stored in the universal system table (system access list (SAL)), as opposed to a frequency band stored in the universal system table (system access list (SAL)), because multiple systems could have identical acquisition parameters such as frequency band, mode, channel number, etc...) (column 2 lines 34-41, column 3 lines 2-38, and column 6 line 57 - column 7 line 2).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to identify the current communication system independently of any

frequency band listed in a universal system table (system access list (SAL)) as taught by Blakeney, II et al. in the method taught by Barber et al. for the purpose of optimal system identification.

However, Barber et al., as modified by Blakeney et al., do not specifically disclose that the predetermined frequency band and the frequency bands are listed in a system access list (SAL) stored in the cellular telephone 10 (mobile station) and the step of selecting the current communication system as a foreign service provider responsive to the step of determining that the frequency band of the current communication system does not correspond to the predetermined frequency band (i.e., primary carrier frequency band) of frequency bands (i.e., primary and secondary carrier frequency bands) listed in the SAL to permit the cellular telephone 10 (mobile station) to obtain emergency service from the current communication system.

In the same field of endeavor, Bamburak et al. clearly show and disclose an intelligent roaming method for selecting a wireless communications service provider in a multi-service provider environment in which a frequency band search schedule (system access list (SAL)) listing an optimal frequency band (predetermined frequency band) of frequency bands (optimal, preferred) is stored in the mobile communication device 10 (mobile station) and used for selecting the service provider (abstract, figures 3, 8, and 9, column 3 lines 37-48, column 4 lines 12-36, and column 8 line 50 - column 9 line 49), said method further includes the step of selecting a current communication system as undesirable or prohibited (foreign service provider) responsive to a step of determining that the frequency band of the current communication system does not correspond to the optimal frequency band (predetermined frequency band) of frequency

bands (optimal, preferred frequency band) listed in the frequency band search schedule (system access list (SAL)) to permit the mobile communication device 10 (mobile station) to obtain emergency service from the current communication system (abstract, column 6 line 57 - column 7 line 4, and column 9 lines 32-45).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to select the current system as a prohibited (foreign) service provider when the frequency band does not corresponds to the predetermined frequency band listed and allow emergency service as taught by Bamburak et al. in the cellular telephone 10 (mobile station) taught by Barber et al., as modified by Blakeney, II et al., for the purpose of providing vital communication services to the user.

Consider **claim 4**, Barber et al., as modified by Blakeney, II et al., and as further modified by Bamburak et al., clearly show and disclose the claimed invention **as applied to claim 1 above**, and, in addition, Barber et al. also disclose the steps of:

determining that the cellular telephone 10 (mobile station) is programmed for full service priority (the determination is implicit in Barber et al. since the telephone 10 allows full service (e.g., emergency and non-emergency calls) to its user) responsive to the steps of determining that the current communication system is not serviced by the home carrier (service provider) and the preferred carrier (service provider) (abstract, column 2 line 64 - column 3 line 3, column 3 lines 37-50, and column 6 line 49 - column 7 line 54),

wherein the cellular telephone 10 (mobile station) selects the current communication system as the preferred neutral service provider (i.e., neither home or preferred) only when the

frequency band (i.e., primary carrier frequency band) of the current communication system corresponds to the predetermined frequency band (i.e., primary carrier frequency band) responsive to the step of determining that the cellular telephone 10 (mobile station) is programmed for full service priority system (abstract, figures 3 and 4, column 2 line 64 - column 3 line 3, column 3 lines 37-50, and column 6 line 49 - column 7 line 54).

However, Barber et al. do not specifically disclose that the predetermined frequency band and the frequency bands are listed in a system access list (SAL) stored in the cellular telephone 10 (mobile station).

Bamburak et al. further disclose a frequency band search schedule (system access list (SAL)), listing an optimal frequency band (predetermined frequency band) of frequency bands (optimal, preferred), stored in the mobile communication device 10 (mobile station) and used for selecting the service provider (abstract, figures 3, 8, and 9, column 3 lines 37-48, column 4 lines 12-36, and column 8 line 50 - column 9 line 49).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the frequency band search schedule (system access list (SAL)) taught by Bamburak et al. into the cellular telephone 10 (mobile station) taught by Barber et al., as modified by Blakeney, II et al. for the purpose of locating an optimal service provider (Bamburak et al.; column 3 lines 43-48).

Consider **claim 5**, and **as applied to claim 1 above**, Barber et al., as modified by Blakeney, II et al., and as further modified by Bamburak et al., clearly show and disclose the claimed invention except the steps of:

determining that the cellular telephone 10 (mobile station) is not programmed for full service priority responsive to the steps of determining that the current communication system is not serviced by the home carrier (service provider) and the preferred carrier (service provider); and

selecting the current communication system as a neutral carrier (service provider) responsive to the step of determining that the cellular telephone 10 (mobile station) is not programmed for full service priority to permit the cellular telephone 10 (mobile station) to obtain limited service from the current communication system.

Bamburak et al. further disclose the steps of determining that the mobile communication device 10 (mobile station) is not programmed for full service priority (i.e., the device 10 is restricted in its operation (column 9 lines 2-15)) responsive to the steps of determining that the current communication system is not serviced by an optimal carrier (service provider) and a preferred carrier (service provider) (i.e., as a result of not matching a SOC/SID of a current system with either an optimal or preferred SOC/SID) (abstract, column 3 lines 37-55, and column 8 line 50 - column 9 line 46) and selecting a current communication system as undesirable or prohibited (neutral service provider) responsive to the step of determining that the mobile communication device 10 (mobile station) is not programmed for full service priority (i.e., the device 10 is restricted in its operation (column 9 lines 2-15)) to permit the mobile communication device 10 (mobile station) to obtain emergency service (limited service) from the current communication system (abstract, column 6 line 57 - column 7 line 4, and column 8 line 50 - column 9 line 45).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to select the current system as a prohibited (neutral) service provider when the mobile communication device 10 (mobile station) is not programmed for full service priority and allow emergency service (limited service) as taught by Bamburak et al. in the cellular telephone 10 (mobile station) taught by Barber et al., as modified by Blakeney, II et al., for the purpose of providing vital services to the user.

Consider **claim 7**, Barber et al., as modified by Blakeney, II et al., and as further modified by Bamburak et al., clearly show and disclose the claimed invention **as applied to claim 1 above**, and, in addition, Barber et al. disclose wherein the step of determining that the current communication system is not serviced by a home carrier (service provider) further comprises the steps of:

comparing the received SID (system information of the current communication system) with a stored home carrier (service provider) SID (system information of the home carrier (service provider) stored in the telephone 10) (figure 2 and figure 3 steps 110 and 116 and column 6 line 66 - column 7 line 7); and

determining that received SID (system information of the current communication system) does not match the stored home carrier (service provider) SID (system information of the home carrier (service provider) stored in the telephone 10 responsive to the step of comparing (i.e., NO path from figure 3 step 110) (figure 3 steps 110 and 116 and column 6 line 66 - column 7 line 7).

However, Barber et al. do not specifically disclose that the system information of the home service provider is stored in a system access list (SAL).

Bamburak et al. also show and disclose a frequency band search schedule (system access list (SAL)) storing system information (e.g., SIDs and SOCs) of a home carrier (service provider) (abstract, figure 9, column 3 lines 37-48, column 4 lines 12-36, and column 8 line 50 - column 9 line 49).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to further incorporate the frequency band search schedule (system access list (SAL)) with the system information taught by Bamburak et al. into the cellular telephone 10 (mobile station) taught by Barber et al., as modified by Blakeney, II et al., for the purpose of storing operational information useful in the method together in order to increase the processing speed.

Consider **claim 8**, Barber et al., as modified by Blakeney, II et al., and as further modified by Bamburak et al., clearly show and disclose the claimed invention **as applied to claim 1 above**, and, in addition, Barber et al. disclose wherein the step of determining that the current communication system is not serviced by a preferred carrier (service provider) further comprises the steps of:

comparing the received SID (system information of the current communication system) with stored preferred carriers (service providers) SIDs (system information of the preferred carriers (service providers) stored in the telephone 10) (figure 3 step 118 and 120 and column 7 line 7-26); and

determining that received SID (system information of the current communication system) does not match the stored preferred carriers (service providers) SIDs (system information of the

preferred carriers (service providers) stored in the telephone 10 responsive to the step of comparing (i.e., NO path from figure 3 step 118) (figure 3 step 118 and 120 and column 7 line 7-26).

However, Barber et al. do not specifically disclose that the system information of the preferred service provider is stored in a system access list (SAL).

Bamburak et al. also show and disclose a frequency band search schedule (system access list (SAL)) storing system information (e.g., SIDs and SOCs) of preferred carriers (service providers) (abstract, figure 9, column 3 lines 37-48, column 4 lines 12-36, and column 8 line 50 - column 9 line 49).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to further incorporate the frequency band search schedule (system access list (SAL)) with the system information taught by Bamburak et al. into the cellular telephone 10 (mobile station) taught by Barber et al., as modified by Blakeney, II et al., for the purpose of storing operational information useful in the method together in order to increase the processing speed.

Consider **claim 10**, Barber et al. clearly show and discloses a preferred carrier selection (intelligent roaming) method for enabling a cellular telephone 10 (mobile station) to select an available cellular carrier (preferred neutral service provider) from a plurality of cellular carriers (service providers) within a communication system (abstract, figures 1, 3, and 4, column 2 lines 51-55), the method comprising the steps of:

scanning a frequency band (figure 3 step 104 and column 6 lines 56-58);

locating a control channel responsive to the step of scanning (inherent since the telephone 10 is receiving a broadcast that it is always transmitted in a control channel) (column 6 lines 56-61);

receiving a SID (system information) of the current communication system servicing a geographic area where the cellular telephone 10 (mobile station) is presently located responsive to the step of locating the control channel to identify the current communication system (figure 1 and figure 3 steps 104 and 106 and column 6 lines 49-64);

comparing the received SID (system information of the current communication system) with a stored home carrier (service provider) SID (system information of the home carrier (service provider) stored in the telephone 10) responsive to the step of receiving a SID (system information of the current communication system) (figure 2 and figure 3 steps 110 and 116 and column 6 line 66 - column 7 line 7);

determining that the received SID (system information of the current communication system) does not match the stored home carrier (service provider) SID (system information of the home carrier (service provider) stored in the telephone 10 responsive to the step of comparing the received SID (system information of the current communication system) to the stored home carrier (service provider) SID (system information of the home carrier (service provider) stored in the telephone 10) (i.e., NO path from figure 3 step 110) to determine that the current communication system is not serviced by the home carrier (service provider) (figure 3 steps 110 and 116 and column 6 line 66 - column 7 line 7);

comparing the received SID (system information of the current communication system)

to stored preferred carriers (service providers) SIDs (system information of preferred carriers (service providers) stored in the telephone 10) responsive to the step of receiving the SID (system information of the current communication system) (figure 2 and figure 3 steps 110 and 116 and column 6 line 66 - column 7 line 26);

determining that the received SID (system information of the current communication system) does not match the stored preferred carriers (service providers) SIDs (system information of the preferred carriers (service providers) stored in the telephone 10 responsive to the step of comparing the received SID (system information of the current communication system) to stored preferred carriers (service providers) SIDs (system information of preferred carriers (service providers) stored in the telephone 10) responsive to the step of receiving the SID (system information of the current communication system) (i.e., NO path from figure 3 step 118) to determine that the current communication system is not serviced by a preferred carrier (service provider) (figure 3 step 118 and 120 and column 6 line 66 - column 7 line 7-26);

determining that a frequency band of the current communication system corresponds to a predetermined frequency band (i.e., primary carrier frequency band) of frequency bands (i.e., primary and secondary carrier frequency bands) stored in the cellular telephone 10 (mobile station) (i.e., as a result of comparing the frequency band of the current communication system to the frequency bands stored in the telephone 10) (column 6 line 46 - column 7 line 54) responsive to the steps of determining that the received SID (system information of the current communication system) does not match the SID of the home carrier (service provider) and the SIDs of the preferred carriers (service providers) stored in the telephone 10 (i.e., by determining

whether a PC-AVAIL flag has been set in response to not matching the received SID with the home carrier (service provider) SID and with the preferred carrier (service provider) SID) (figure 4 steps 134 and 144 and column 7 lines 30-41); and

selecting the current communication system as the preferred neutral service provider (i.e., neither home or preferred) only when the frequency band (i.e., primary carrier frequency band) of the current communication system corresponds to the predetermined frequency band (i.e., primary carrier frequency band) to permit the cellular telephone 10 (mobile station) to obtain full service from the current communication system (figure 3 steps 152, 154, and 112 and column 7 lines 41-54).

However, Barber et al. do not specifically disclose that the step of scanning is independent of any frequency bands listed in a system access list (SAL) stored in the cellular telephone 10 (mobile station).

In the same field of endeavor, Blakeney, II et al. disclose a method for performing preferred system selection in which current system information is received by inherently scanning a frequency band (e.g., of the most recently used (MRU) system) independent of any frequency bands listed in a universal system table (system access list (SAL)) stored in subscriber (mobile) station (column 2 lines 34-41, column 3 lines 2-38, and column 6 line 57 - column 7 line 2).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to scan a frequency band independently of any frequency bands listed in a universal system table (system access list (SAL)) as taught by Blakeney, II et al. in the method

taught by Barber et al. for the purpose of optimal system acquisition.

However, Barber et al., as modified by Blakeney et al., do not specifically disclose that the home and preferred carriers (service provider) system information as well as the predetermined frequency band and the frequency bands are stored in a system access list (SAL) stored in the cellular telephone 10 (mobile station).

In the same field of endeavor, Bamburak et al. clearly show and disclose an intelligent roaming method for selecting a wireless communications service provider in a multi-service provider environment in which a frequency band search schedule (system access list (SAL)) storing frequency bands (optimal, preferred), an optimal frequency band (predetermined frequency band) of said frequency bands (optimal, preferred), and system information (e.g., SIDs and SOCs) of home and preferred carriers (service providers) is stored in the mobile communication device 10 (mobile station) and used for selecting the service provider (abstract, figures 3, 8, and 9, column 3 lines 37-48, column 4 lines 12-36, and column 8 line 50 - column 9 line 49).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the frequency band search schedule (system access list (SAL)) taught by Bamburak et al. into the cellular telephone 10 (mobile station) taught by Barber et al., as modified by Blakeney, II et al., for the purpose of locating an optimal service provider (Bamburak et al.; column 3 lines 43-48).

Consider **claim 11**, and **as applied to claim 10 above**, Barber et al., as modified by Blakeney, II et al., and as further modified by Bamburak et al., clearly show and disclose the

claimed invention except that the predetermined frequency band (i.e., primary carrier frequency band) comprises a first frequency band of the frequency bands listed in priority order in the SAL.

Bamburak et al. further disclose that the optimal frequency band (predetermined frequency band) comprises a first frequency band OPT of frequency bands listed in priority order in the frequency band search schedule (system access list (SAL)) (abstract, figures 8 and 9, column 4 lines 36-47, column 8 line 62 - column 9 line 45).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to list the optimal frequency band (predetermined frequency band) first in the frequency band search schedule (system access list (SAL)) as taught by Bamburak et al. in the cellular telephone 10 (mobile station) taught by Barber et al., as modified by Blakeney, II et al., for the purpose of locating the most optimal service provider (Bamburak et al.; column 3 lines 43-48).

Consider **claim 12**, Barber et al. clearly show and discloses a preferred carrier selection (intelligent roaming) method for enabling a cellular telephone 10 (mobile station) to select an available cellular carrier (service provider) from a plurality of cellular carriers (service providers) within a communication system (abstract, figures 1, 3, and 4, column 2 lines 51-55), the method comprising the steps of:

scanning a frequency band (figure 3 step 104 and column 6 lines 56-58);

locating a control channel responsive to the step of scanning (inherent since the telephone 10 is receiving a broadcast that it is always transmitted in a control channel) (column 6 lines 56-61);

receiving a SID (system information) of the current communication system servicing a geographic area where the cellular telephone 10 (mobile station) is presently located responsive to the step of locating the control channel to identify the current communication system (figure 1 and figure 3 steps 104 and 106 and column 6 lines 49-64);

comparing the received SID (system information of the current communication system) with a stored home carrier (service provider) SID (system information of the home carrier (service provider) stored in the telephone 10) responsive to the step of receiving a SID (system information of the current communication system) (figure 2 and figure 3 steps 110 and 116 and column 6 line 66 - column 7 line 7);

determining that the received SID (system information of the current communication system) does not match the stored home carrier (service provider) SID (system information of the home carrier (service provider) stored in the telephone 10 responsive to the step of comparing the received SID (system information of the current communication system) to the stored home carrier (service provider) SID (system information of the home carrier (service provider) stored in the telephone 10) (i.e., NO path from figure 3 step 110) to determine that the current communication system is not serviced by the home carrier (service provider) (figure 3 steps 110 and 116 and column 6 line 66 - column 7 line 7);

comparing the received SID (system information of the current communication system) to stored preferred carriers (service providers) SIDs (system information of preferred carriers (service providers) stored in the telephone 10) responsive to the step of receiving the SID (system information of the current communication system) (figure 2 and figure 3 steps 110 and

116 and column 6 line 66 - column 7 line 26);

determining that the received SID (system information of the current communication system) does not match the stored preferred carriers (service providers) SIDs (system information of the preferred carriers (service providers) stored in the telephone 10 responsive to the step of comparing the received SID (system information of the current communication system) to stored preferred carriers (service providers) SIDs (system information of preferred carriers (service providers) stored in the telephone 10) responsive to the step of receiving the SID (system information of the current communication system) (i.e., NO path from figure 3 step 118) to determine that the current communication system is not serviced by a preferred carrier (service provider) (figure 3 step 118 and 120 and column 6 line 66 - column 7 line 7-26);

determining that a frequency band of the current communication system corresponds to a predetermined frequency band (i.e., primary carrier frequency band) of frequency bands (i.e., primary and secondary carrier frequency bands) stored in the cellular telephone 10 (mobile station) (i.e., as a result of comparing the frequency band of the current communication system to the frequency bands stored in the telephone 10) (column 6 line 46 - column 7 line 54) responsive to the steps of determining that the received SID (system information of the current communication system) does not match the SID of the home carrier (service provider) and the SIDs of the preferred carriers (service providers) stored in the telephone 10 (i.e., by determining whether a PC-AVAIL flag has been set in response to not matching the received SID with the home carrier (service provider) SID and with the preferred carrier (service provider) SID) (figure 4 steps 134 and 144 and column 7 lines 30-41);

determining that a frequency band of the current communication system does not correspond to the predetermined frequency band (i.e., primary carrier frequency band) of frequency bands (i.e., primary and secondary carrier frequency bands) stored in the cellular telephone 10 (mobile station) responsive to the result of comparing the frequency band of the current communication system to the frequency bands stored in the telephone 10) (column 6 line 46 - column 7 line 54).

However, Barber et al. do not specifically disclose that the step of scanning is independent of any frequency bands listed in a system access list (SAL) stored in the cellular telephone 10 (mobile station).

In the same field of endeavor, Blakeney, II et al. disclose a method for performing preferred system selection in which current system information is received by inherently scanning a frequency band (e.g., of the most recently used (MRU) system) independent of any frequency bands listed in a universal system table (system access list (SAL)) stored in subscriber (mobile) station (column 2 lines 34-41, column 3 lines 2-38, and column 6 line 57 - column 7 line 2).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to scan a frequency band independently of any frequency bands listed in a universal system table (system access list (SAL)) as taught by Blakeney, II et al. in the method taught by Barber et al. for the purpose of optimal system acquisition.

However, Barber et al., as modified by Blakeney et al., do not specifically disclose the step of selecting the current communication system as a foreign service provider responsive to

the step of determining that the frequency band of the current communication system does not correspond to the predetermined frequency band (i.e., primary carrier frequency band) of frequency bands (i.e., primary and secondary carrier frequency bands) listed in the SAL to permit the cellular telephone 10 (mobile station) to obtain emergency service from the current communication system.

In the same field of endeavor, Bamburak et al. also disclose the step of selecting a current communication system as undesirable or prohibited (foreign service provider) responsive to a step of determining that the frequency band of the current communication system does not correspond to the optimal frequency band (predetermined frequency band) of frequency bands (optimal, preferred frequency band) listed in the frequency band search schedule (system access list (SAL)) to permit the mobile communication device 10 (mobile station) to obtain emergency service from the current communication system (abstract, column 6 line 57 - column 7 line 4, and column 9 lines 32-45).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to select the current system as a prohibited (foreign) service provider when the frequency band does not corresponds to the predetermined frequency band listed and allow emergency service as taught by Bamburak et al. in the cellular telephone 10 (mobile station) taught by Barber et al., as modified by Blakeney, II et al., for the purpose of providing vital communication services to the user.

Consider **claim 13**, Barber et al., as modified by Blakeney, et al., and as further modified by Bamburak et al., clearly show and disclose the claimed invention **as applied to claim 10**

above, and, in addition, Barber et al. also disclose the steps of:

determining that the cellular telephone 10 (mobile station) is programmed for full service priority (the determination is implicit in Barber et al. since the telephone 10 allows full service (e.g., emergency and non-emergency calls) to its user) responsive to the steps of determining that the received SID (system information of the current communication system) does not match the home carrier (service provider) and the preferred carriers (service providers) SIDs stored in the telephone 10 (abstract, column 2 line 64 - column 3 line 3, column 3 lines 37-50, and column 6 line 49 - column 7 line 54),

wherein the cellular telephone 10 (mobile station) selects the current communication system as the preferred neutral service provider (i.e., neither home or preferred) responsive to the step of determining that the cellular telephone 10 (mobile station) is programmed for full service priority system (abstract, figures 3 and 4, column 2 line 64 - column 3 line 3, column 3 lines 37-50, and column 6 line 49 - column 7 line 54).

However, Barber et al. do not specifically disclose that the home and preferred carriers (service provider) system information are stored in the system access list (SAL) stored in the cellular telephone 10 (mobile station).

Bamburak et al. further show and disclose a frequency band search schedule (system access list (SAL)), storing system information (e.g., SIDs and SOCs) of home and preferred carriers (service providers), stored in the mobile communication device 10 (mobile station) and used for selecting the service provider (abstract, figures 3, 8, and 9, column 3 lines 37-48, column 4 lines 12-36, and column 8 line 50 - column 9 line 49).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the frequency band search schedule (system access list (SAL)) with the system information taught by Bamburak et al. into the cellular telephone 10 (mobile station) taught by Barber et al., as modified by Blakeney, II et al. for the purpose of storing operational information useful in the method together in order to increase the processing speed.

Consider **claim 14**, and **as applied to claim 10 above**, Barber et al., as modified by Blakeney, et al., and as further modified by Bamburak et al., clearly show and disclose the claimed invention except the steps of:

determining that the cellular telephone 10 (mobile station) is not programmed for full service priority responsive to the steps of determining that the received SID (system information of the current communication system) does not match the home carrier (service provider) and the preferred carriers (service providers) SIDs stored in the telephone 10; and

selecting the current communication system as a neutral carrier (service provider) responsive to the step of determining that the cellular telephone 10 (mobile station) is not programmed for full service priority to permit the cellular telephone 10 (mobile station) to obtain limited service from the current communication system.

Bamburak et al. further disclose the steps of determining that the mobile communication device 10 (mobile station) is not programmed for full service priority (i.e., the device 10 is restricted in its operation (column 9 lines 2-15)) responsive to the steps of determining that the current communication system is not serviced by an optimal carrier (service provider) and a

preferred carrier (service provider) (i.e., as a result of not matching a SOC/SID of a current system with either an optimal or preferred SOC/SID) (abstract, column 3 lines 37-55, and column 8 line 50 - column 9 line 46) and selecting a current communication system as undesirable or prohibited (neutral service provider) responsive to the step of determining that the mobile communication device 10 (mobile station) is not programmed for full service priority (i.e., the device 10 is restricted in its operation (column 9 lines 2-15)) to permit the mobile communication device 10 (mobile station) to obtain emergency service (limited service) from the current communication system (abstract, column 6 line 57 - column 7 line 4, and column 8 line 50 - column 9 line 45).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to select the current system as a prohibited (neutral) service provider when the mobile communication device 10 (mobile station) is not programmed for full service priority and allow emergency service (limited service) as taught by Bamburak et al. in the cellular telephone 10 (mobile station) taught by Barber et al., as modified by Blakeney, II et al., for the purpose of providing vital services to the user.

Consider **claims 15 and 19**, Barber et al. clearly show and discloses a preferred carrier selection (intelligent roaming) method for enabling a cellular telephone 10 (mobile station) to select an available cellular carrier (preferred neutral service provider) from a plurality of cellular carriers (service providers) within a communication system (abstract, figures 1, 3, and 4, column 2 lines 51-55), the method comprising the steps of:

identifying a current communication system (figure 1) servicing a geographic area where

the cellular telephone 10 (mobile station) is presently located (i.e., by scanning a primary carrier frequency band (figure 3 step 104), locating a control channel in response to the scanning (inherent since the telephone 10 is receiving a broadcast that it is always transmitted in a control channel), and receiving a system identification code (SID) in response to locating the control channel (reads on **claim 19**)) (figure 3 steps 104 and 106 and column 6 lines 49-64);

determining that the current communication system is not serviced by a home carrier (service provider) responsive to the step of identifying the current communication system (i.e., by comparing the received SID with a stored home carrier (service provider) SID) (figure 3 steps 110 and 116 and column 6 line 66 - column 7 line 7);

determining that the current communication system is not serviced by a preferred carrier (service provider) responsive to the step of identifying the current communication system (i.e., by comparing the received SID with preferred carriers (service providers) SIDs) (figure 3 steps 118 and 120 and column 7 lines 20-26);

determining that the cellular telephone 10 (mobile station) is programmed for full service priority (the determination is implicit in Barber et al. since the telephone 10 allows full service (e.g., emergency and non-emergency calls) to its user) responsive to the steps of determining that the current communication system is not serviced by the home carrier (service provider) and the preferred carrier (service provider) (abstract, column 2 line 64 - column 3 line 3, column 3 lines 37-50, and column 6 line 49 - column 7 line 54);

determining that a frequency band of the current communication system corresponds to a predetermined frequency band (i.e., primary carrier frequency band) of frequency bands (i.e.,

primary and secondary carrier frequency bands) stored in the cellular telephone 10 (mobile station) (i.e., as a result of comparing the frequency band of the current communication system to the frequency bands stored in the telephone 10) (column 6 line 46 - column 7 line 54)) responsive to the step of determining that the cellular telephone 10 (mobile station) is programmed for full service priority (the determination is implicit in Barber et al. since the telephone 10 allows full service (e.g., emergency and non-emergency calls) to its user) (abstract, column 2 line 64 - column 3 line 3, column 3 lines 37-50, and column 6 line 49 - column 7 line 54); and

selecting the current communication system as the preferred neutral service provider (i.e., neither home or preferred) only when the frequency band (i.e., primary carrier frequency band) of the current communication system corresponds to the predetermined frequency band (i.e., primary carrier frequency band) to permit the cellular telephone 10 (mobile station) to obtain full service from the current communication system (figure 3 steps 152, 154, and 112 and column 7 lines 41-54).

However, Barber et al. do not specifically disclose that the step of identifying is independent of any frequency bands listed in a system access list (SAL) stored in the cellular telephone 10 (mobile station).

In the same field of endeavor, Blakeney, II et al. disclose a method for performing preferred system selection in which a current communication system is identified independent of any frequency bands listed in a universal system table (system access list (SAL)) stored in subscriber (mobile) station (i.e., the current system is identified through a system ID (SID) stored

in the universal system table (system access list (SAL)), as opposed to a frequency band stored in the universal system table (system access list (SAL)), because multiple systems could have identical acquisition parameters such as frequency band, mode, channel number, etc...) (column 2 lines 34-41, column 3 lines 2-38, and column 6 line 57 - column 7 line 2).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to identify the current communication system independently of any frequency band listed in a universal system table (system access list (SAL)) as taught by Blakeney, II et al. in the method taught by Barber et al. for the purpose of optimal system identification.

However, Barber et al., as modified by Blakeney, II et al., do not specifically disclose that the predetermined frequency band and the frequency bands are listed in a system access list (SAL) stored in the cellular telephone 10 (mobile station).

In the same field of endeavor, Bamburak et al. clearly show and disclose an intelligent roaming method for selecting a wireless communications service provider in a multi-service provider environment in which a frequency band search schedule (system access list (SAL)) listing an optimal frequency band (predetermined frequency band) of frequency bands (optimal, preferred) is stored in the mobile communication device 10 (mobile station) and used for selecting the service provider (abstract, figures 3, 8, and 9, column 3 lines 37-48, column 4 lines 12-36, and column 8 line 50 - column 9 line 49).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the frequency band search schedule (system access list

(SAL)) taught by Bamburak et al. into the cellular telephone 10 (mobile station) taught by Barber et al., as modified by Blakeney et al., for the purpose of locating an optimal service provider (Bamburak et al.; column 3 lines 43-48).

Consider **claim 16**, and **as applied to claim 15 above**, Barber et al., as modified by Blakeney, II et al., and as further modified by Bamburak et al., clearly show and disclose the claimed invention except that the predetermined frequency band (i.e., primary carrier frequency band) comprises a first frequency band of the frequency bands listed in priority order in the SAL.

Bamburak et al. further disclose that the optimal frequency band (predetermined frequency band) comprises a first frequency band OPT of frequency bands listed in priority order in the frequency band search schedule (system access list (SAL)) (abstract, figures 8 and 9, column 4 lines 36-47, column 8 line 62 - column 9 line 45).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to list the optimal frequency band (predetermined frequency band) first in the frequency band search schedule (system access list (SAL)) as taught by Bamburak et al. in the cellular telephone 10 (mobile station) taught by Barber et al., as modified by Blakeney, II et al., for the purpose of locating the most optimal service provider (Bamburak et al.; column 3 lines 43-48).

Consider **claim 17**, Barber et al. clearly show and discloses a preferred carrier selection (intelligent roaming) method for enabling a cellular telephone 10 (mobile station) to select an available cellular carrier (service provider) from a plurality of cellular carriers (service providers) within a communication system (abstract, figures 1, 3, and 4, column 2 lines 51-55), the method

comprising the steps of:

identifying a current communication system (figure 1) servicing a geographic area where the cellular telephone 10 (mobile station) is presently located (figure 3 steps 104 and 106 and column 6 lines 49-64);

determining that the current communication system is not serviced by a home carrier (service provider) responsive to the step of identifying the current communication system (i.e., by comparing the received SID with a stored home carrier (service provider) SID) (figure 3 steps 110 and 116 and column 6 line 66 - column 7 line 7);

determining that the current communication system is not serviced by a preferred carrier (service provider) responsive to the step of identifying the current communication system (i.e., by comparing the received SID with preferred carriers (service providers) SIDs) (figure 3 steps 118 and 120 and column 7 lines 20-26);

determining that the cellular telephone 10 (mobile station) is programmed for full service priority (the determination is implicit in Barber et al. since the telephone 10 allows full service (e.g., emergency and non-emergency calls) to its user) responsive to the steps of determining that the current communication system is not serviced by the home carrier (service provider) and the preferred carrier (service provider) (abstract, column 2 line 64 - column 3 line 3, column 3 lines 37-50, and column 6 line 49 - column 7 line 54); and

determining that a frequency band of the current communication system does not correspond to the predetermined frequency band (i.e., primary carrier frequency band) of frequency bands (i.e., primary and secondary carrier frequency bands) stored in the cellular

telephone 10 (mobile station) (i.e., by determining whether a PC-AVAIL flag has not been set in response to not matching the received SID with the home carrier (service provider) SID and with the preferred carrier (service provider) SID) (figure 4 steps 134 and 136 and column 7 lines 30-38) responsive to the step of determining that the cellular telephone 10 (mobile station) is programmed for full service priority (the determination is implicit in Barber et al. since the telephone 10 allows full service (e.g., emergency and non-emergency calls) to its user) (abstract, column 2 line 64 - column 3 line 3, column 3 lines 37-50, and column 6 line 49 - column 7 line 54).

However, Barber et al. do not specifically disclose that the step of identifying is independent of any frequency bands listed in a system access list (SAL) stored in the cellular telephone 10 (mobile station).

In the same field of endeavor, Blakeney, II et al. disclose a method for performing preferred system selection in which a current communication system is identified independent of any frequency bands listed in a universal system table (system access list (SAL)) stored in subscriber (mobile) station (i.e., the current system is identified through a system ID (SID) stored in the universal system table (system access list (SAL)), as opposed to a frequency band stored in the universal system table (system access list (SAL)), because multiple systems could have identical acquisition parameters such as frequency band, mode, channel number, etc...) (column 2 lines 34-41, column 3 lines 2-38, and column 6 line 57 - column 7 line 2).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to identify the current communication system independently of any

frequency band listed in a universal system table (system access list (SAL)) as taught by Blakeney, II et al. in the method taught by Barber et al. for the purpose of optimal system identification.

However, Barber et al., as modified by Blakeney, II et al., do not specifically disclose the step of selecting the current communication system as a foreign service provider responsive to the step of determining that the frequency band of the current communication system does not correspond to the predetermined frequency band (i.e., primary carrier frequency band) of frequency bands (i.e., primary and secondary carrier frequency bands) listed in the SAL to permit the cellular telephone 10 (mobile station) to obtain emergency service from the current communication system.

Bamburak et al. also disclose the step of selecting a current communication system as undesirable or prohibited (foreign service provider) responsive to a step of determining that the frequency band of the current communication system does not correspond to the optimal frequency band (predetermined frequency band) of frequency bands (optimal, preferred frequency band) listed in the frequency band search schedule (system access list (SAL)) to permit the mobile communication device 10 (mobile station) to obtain emergency service from the current communication system (abstract, column 6 line 57 - column 7 line 4, and column 9 lines 32-45).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to select the current system as a prohibited (foreign) service provider when the frequency band does not corresponds to the predetermined frequency band listed and

allow emergency service as taught by Bamburak et al. in the cellular telephone 10 (mobile station) taught by Barber et al., as modified by Blakeney, II et al., for the purpose of providing vital communication services to the user.

Consider **claim 18**, and **as applied to claim 15 above**, Barber et al., as modified by Blakeney, II et al., and as further modified by Bamburak et al., clearly show and disclose the claimed invention except the steps of:

determining that the cellular telephone 10 (mobile station) is not programmed for full service priority responsive to the steps of determining that the current communication system is not serviced by the preferred carrier (service provider); and

selecting the current communication system as a neutral carrier (service provider) responsive to the step of determining that the cellular telephone 10 (mobile station) is not programmed for full service priority to permit the cellular telephone 10 (mobile station) to obtain limited service from the current communication system.

Bamburak et al. further disclose the steps of determining that the mobile communication device 10 (mobile station) is not programmed for full service priority (i.e., the device 10 is restricted in its operation (column 9 lines 2-15)) responsive to the step of determining that the current communication system is not serviced by a preferred carrier (service provider) (i.e., as a result of not matching a SOC/SID of a current system with a preferred SOC/SID) (abstract, column 3 lines 37-55, and column 8 line 50 - column 9 line 46) and selecting a current communication system as undesirable or prohibited (neutral service provider) responsive to the step of determining that the mobile communication device 10 (mobile station) is not

programmed for full service priority (i.e., the device 10 is restricted in its operation (column 9 lines 2-15)) to permit the mobile communication device 10 (mobile station) to obtain emergency service (limited service) from the current communication system (abstract, column 6 line 57 - column 7 line 4, and column 8 line 50 - column 9 line 45).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to select the current system as a prohibited (neutral) service provider when the mobile communication device 10 (mobile station) is not programmed for full service priority and allow emergency service (limited service) as taught by Bamburak et al. in the cellular telephone 10 (mobile station) taught by Barber et al., as modified by Blakeney, II et al., for the purpose of providing vital services to the user.

Consider **claim 20**, Barber et al., as modified by Blakeney, II et al., and as further modified by Bamburak et al., clearly show and disclose the claimed invention **as applied to claim 15 above**, and, in addition, Barber et al. disclose wherein the step of determining that the current communication system is not serviced by a home carrier (service provider) further comprises the steps of:

comparing the received SID (system information of the current communication system) with a stored home carrier (service provider) SID (system information of the home carrier (service provider) stored in the telephone 10) (figure 2 and figure 3 steps 110 and 116 and column 6 line 66 - column 7 line 7); and

determining that received SID (system information of the current communication system) does not match the stored home carrier (service provider) SID (system information of the home

carrier (service provider) stored in the telephone 10 responsive to the step of comparing (i.e., NO path from figure 3 step 110) (figure 3 steps 110 and 116 and column 6 line 66 - column 7 line 7).

However, Barber et al. do not specifically disclose that the system information of the home service provider is stored in a system access list (SAL).

Bamburak et al. also show and disclose a frequency band search schedule (system access list (SAL)) storing system information (e.g., SIDs and SOCs) of a home carrier (service provider) (abstract, figure 9, column 3 lines 37-48, column 4 lines 12-36, and column 8 line 50 - column 9 line 49).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to further incorporate the frequency band search schedule (system access list (SAL)) with the system information taught by Bamburak et al. into the cellular telephone 10 (mobile station) taught by Barber et al., as modified by Blakeney, II et al., for the purpose of storing operational information useful in the method together in order to increase the processing speed.

Consider **claim 21**, Barber et al., as modified by Blakeney, II et al., and as further modified by Bamburak et al., clearly show and disclose the claimed invention **as applied to claim 15 above**, and, in addition, Barber et al. disclose wherein the step of determining that the current communication system is not serviced by a preferred carrier (service provider) further comprises the steps of:

comparing the received SID (system information of the current communication system) with stored preferred carriers (service providers) SIDs (system information of the preferred

carriers (service providers) stored in the telephone 10) (figure 3 step 118 and 120 and column 7 line 7-26); and

determining that received SID (system information of the current communication system) does not match the stored preferred carriers (service providers) SIDs (system information of the preferred carriers (service providers) stored in the telephone 10 responsive to the step of comparing (i.e., NO path from figure 3 step 118) (figure 3 step 118 and 120 and column 7 line 7-26).

However, Barber et al. do not specifically disclose that the system information of the preferred service provider is stored in a system access list (SAL).

Bamburak et al. also show and disclose a frequency band search schedule (system access list (SAL)) storing system information (e.g., SIDs and SOCs) of preferred carriers (service providers) (abstract, figure 9, column 3 lines 37-48, column 4 lines 12-36, and column 8 line 50 - column 9 line 49).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to further incorporate the frequency band search schedule (system access list (SAL)) with the system information taught by Bamburak et al. into the cellular telephone 10 (mobile station) taught by Barber et al., as modified by Blakeney, II et al., for the purpose of storing operational information useful in the method together in order to increase the processing speed.

Consider **claim 22**, Barber et al., as modified by Blakeney, II et al., and as further modified by Bamburak et al., clearly show and disclose the claimed invention **as applied to**

claim 15 above, and, in addition, Barber et al. disclose determining that a frequency band of the current communication system corresponds to a predetermined frequency band (i.e., primary carrier frequency band) of frequency bands (i.e., primary and secondary carrier frequency bands) stored in the cellular telephone 10 (mobile station) (i.e., as a result of comparing the frequency band of the current communication system to the frequency bands stored in the telephone 10) (reads on the comparing step) (column 6 line 46 - column 7 line 54)).

However, Barber et al. do not specifically disclose that the frequency bands are listed in priority order in a system access list (SAL).

Bamburak et al. further disclose the listing of frequency bands in priority order in the frequency band search schedule (system access list (SAL)) (abstract, figures 8 and 9, column 4 lines 36-47, column 8 line 62 - column 9 line 45).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to further list, in priority order, the frequency bands in the frequency band search schedule (system access list (SAL)) as taught by Bamburak et al. in the cellular telephone 10 (mobile station) taught by Barber et al., as modified by Blakeney, II et al., for the purpose of locating the most optimal service provider (Bamburak et al.; column 3 lines 43-48).

Consider **claim 23**, Barber et al. clearly disclose a memory 26 (article, computer-readable data storage medium) (figure 1) adapted to be carried by a cellular telephone 10 (mobile station), the memory 26 (article, computer-readable data storage medium) adapted to store a preferred carrier selection (intelligent roaming) method for performing steps for enabling the cellular telephone 10 (mobile station) to select an available cellular carrier (preferred neutral service

provider) from a plurality of cellular carriers (service providers) within a communication system, (abstract, figures 1, 3, and 4, and column 2 lines 51-55), since the memory 26 (article, computer-readable data storage medium) contains the programming information that controls the operation of the cellular telephone 10 (column 4 lines 23-34), the memory 26 (article, computer-readable data storage medium) comprises:

programming information (computer program code) recorded on the memory 26 (computer-readable data storage medium) for performing a step of identifying a current communication system servicing a geographic area where the cellular telephone 10 (mobile station) is presently located (figure 3 and column 49-64);

programming information (computer program code) recorded on the memory 26 (computer-readable data storage medium) for performing a step of determining that the current communication system is not serviced by a home carrier (service provider) responsive to the step of identifying the current communication system (figure 3 and column 6 line 66 - column 7 line 7);

programming information (computer program code) recorded on the memory 26 (computer-readable data storage medium) for performing a step of determining that the current communication system is not serviced by a preferred carrier (service provider) responsive to the step of identifying the current communication system (figure 3 and column 7 lines 20-26);

programming information (computer program code) recorded on the memory 26 (computer-readable data storage medium) for performing a step of determining that a frequency band of the current communication system corresponds to a predetermined frequency band (i.e.,

primary carrier frequency band) of frequency bands (i.e., primary and secondary carrier frequency bands) stored in the cellular telephone 10 (mobile station) responsive to the steps of determining that the current communication system is not serviced by the home carrier (service provider) and the preferred carrier (service provider) (figures 2 and 4, column 6 line 46 - column 7 line 54); and

programming information (computer program code) recorded on the memory 26 (computer-readable data storage medium) for performing a step of selecting the current communication system as the preferred neutral carrier (service provider) (i.e., neither home or preferred) only when the frequency band of the current communication system corresponds to the predetermined frequency band (i.e., primary carrier frequency band) to permit the cellular telephone 10 (mobile station) to obtain full service from the current communication system (figure 3 and column 7 lines 41-54).

However, Barber et al. do not specifically disclose that the step of identifying is independent of any frequency bands listed in a system access list (SAL) stored in the cellular telephone 10 (mobile station).

In the same field of endeavor, Blakeney, II et al. disclose a method for performing preferred system selection in which a current communication system is identified independent of any frequency bands listed in a universal system table (system access list (SAL)) stored in subscriber (mobile) station (i.e., the current system is identified through a system ID (SID) stored in the universal system table (system access list (SAL)), as opposed to a frequency band stored in the universal system table (system access list (SAL)), because multiple systems could have

identical acquisition parameters such as frequency band, mode, channel number, etc...) (column 2 lines 34-41, column 3 lines 2-38, and column 6 line 57 - column 7 line 2).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to identify the current communication system independently of any frequency band listed in a universal system table (system access list (SAL)) as taught by Blakeney, II et al. in the method taught by Barber et al. for the purpose of optimal system identification.

However, Barber et al., as modified by Blakeney et al., do not specifically disclose that the predetermined frequency band and the frequency bands are listed in a system access list (SAL) stored in the cellular telephone 10 (mobile station).

In the same field of endeavor, Bamburak et al. clearly show and disclose an intelligent roaming method for selecting a wireless communications service provider in a multi-service provider environment in which a frequency band search schedule (system access list (SAL)) listing an optimal frequency band (predetermined frequency band) of frequency bands (optimal, preferred) is stored in the mobile communication device 10 (mobile station) and used for selecting the service provider (abstract, figures 3, 8, and 9, column 3 lines 37-48, column 4 lines 12-36, and column 8 line 50 - column 9 line 49).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the frequency band search schedule (system access list (SAL)) taught by Bamburak et al. into the cellular telephone 10 (mobile station) taught by Barber et al., as modified by Blakeney, II et al., for the purpose of locating an optimal service provider

(Bamburak et al.; column 3 lines 43-48).

Consider **claim 24**, Barber et al. clearly show and disclose a cellular telephone 10 (mobile station) adapted to store a preferred carrier selection (intelligent roaming) method for performing steps for enabling the cellular telephone 10 (mobile station) to select an available cellular carrier (preferred neutral service provider) from a plurality of cellular carriers (service providers) within a communication system, (abstract, figures 1, 3, and 4, and column 2 lines 51-55), the cellular telephone 10 (mobile station) comprising:

an antenna 20 (figure 1)

a transceiver electrically connected to the antenna (figure 1 and column 4 lines 23-25);

a control system 24 electrically coupled to the transceiver 22 (figure 1 and column 4 lines 23-25); and

a memory 26 (computer-readable data storage medium) coupled to the control system 24 (figure 1 and column 4 lines 24-34), since the memory 26 (computer-readable data storage medium) contains the programming information that controls the operation of the cellular telephone 10 (column 4 lines 23-34), the memory 26 (computer-readable data storage medium) includes:

programming information (computer program code) recorded on the memory 26 (computer-readable data storage medium) for performing a step of identifying a current communication system servicing a geographic area where the cellular telephone 10 (mobile station) is presently located (figure 3 and column 49-64);

programming information (computer program code) recorded on the memory 26

(computer-readable data storage medium) for performing a step of determining that the current communication system is not serviced by a home carrier (service provider) responsive to the step of identifying the current communication system (figure 3 and column 6 line 66 - column 7 line 7);

programming information (computer program code) recorded on the memory 26 (computer-readable data storage medium) for performing a step of determining that the current communication system is not serviced by a preferred carrier (service provider) responsive to the step of identifying the current communication system (figure 3 and column 7 lines 20-26);

programming information (computer program code) recorded on the memory 26 (computer-readable data storage medium) for performing a step of determining that a frequency band of the current communication system corresponds to a predetermined frequency band (i.e., primary carrier frequency band) of frequency bands (i.e., primary and secondary carrier frequency bands) stored in the cellular telephone 10 (mobile station) responsive to the steps of determining that the current communication system is not serviced by the home carrier (service provider) and the preferred carrier (service provider) (figures 2 and 4, column 6 line 46 - column 7 line 54); and

programming information (computer program code) recorded on the memory 26 (computer-readable data storage medium) for performing a step of selecting the current communication system as the preferred neutral carrier (service provider) (i.e., neither home or preferred) only when the frequency band of the current communication system

corresponds to the predetermined frequency band (i.e., primary carrier frequency band) to permit the cellular telephone 10 (mobile station) to obtain full service from the current communication system (figure 3 and column 7 lines 41-54).

However, Barber et al. do not specifically disclose that the step of identifying is independent of any frequency bands listed in a system access list (SAL) stored in the cellular telephone 10 (mobile station).

In the same field of endeavor, Blakeney, II et al. disclose a method for performing preferred system selection in which a current communication system is identified independent of any frequency bands listed in a universal system table (system access list (SAL)) stored in subscriber (mobile) station (i.e., the current system is identified through a system ID (SID) stored in the universal system table (system access list (SAL)), as opposed to a frequency band stored in the universal system table (system access list (SAL)), because multiple systems could have identical acquisition parameters such as frequency band, mode, channel number, etc…) (column 2 lines 34-41, column 3 lines 2-38, and column 6 line 57 - column 7 line 2).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to identify the current communication system independently of any frequency band listed in a universal system table (system access list (SAL)) as taught by Blakeney, II et al. in the method taught by Barber et al. for the purpose of optimal system identification.

However, Barber et al., as modified by Blakeney, II et al., do not specifically disclose that the predetermined frequency band and the frequency bands are listed in a system access list

(SAL) stored in the cellular telephone 10 (mobile station).

In the same field of endeavor, Bamburak et al. clearly show and disclose an intelligent roaming method for selecting a wireless communications service provider in a multi-service provider environment in which a frequency band search schedule (system access list (SAL)) listing an optimal frequency band (predetermined frequency band) of frequency bands (optimal, preferred) is stored in the mobile communication device 10 (mobile station) and used for selecting the service provider (abstract, figures 3, 8, and 9, column 3 lines 37-48, column 4 lines 12-36, and column 8 line 50 - column 9 line 49).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the frequency band search schedule (system access list (SAL)) taught by Bamburak et al. into the cellular telephone 10 (mobile station) taught by Barber et al., as modified by Blakeney, II et al., for the purpose of locating an optimal service provider (Bamburak et al.; column 3 lines 43-48).

Response to Arguments

5. Applicant's arguments with respect to **claims 1, 3, 6, 10, 12, 15, 17, 19, 23, and 24** have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office Action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. Any response to this Office Action should be **faxed to** (703) 872-9306 **or mailed to**:

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Hand-delivered responses should be brought to

Customer Service Window
Randolph Building
401 Dulany Street
Alexandria, VA 22314

8. Any inquiry concerning this communication or earlier communications from the

Examiner should be directed to Rafael Perez-Gutierrez whose telephone number is (703) 308-8996. The Examiner can normally be reached on Monday-Thursday from 6:30am to 5:00pm.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Marsha D. Banks-Harold can be reached on (703) 305-4379. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700 or call customer service at (703) 306-0377.

Rafael Perez-Gutierrez
R.P.G./rpg **RAFAEL PEREZ-GUTIERREZ**
PATENT EXAMINER
February 15, 2005